

Table 4
Screening Analysis - Summary of Benefits

Baseline Vessel Model Analyzed	Measure	Annualized Cost (\$)	Outflows after Measure			Baseline Outflows			Reduction Increment Outflows Total (Bbls)	Cost Effectiveness			
			ACC (Bbls)	OPER Annual (Bbls)	Total (Bbls)	ACC (Bbls)	OPER Annual (Bbls)	Total (Bbls)		ACC (\$/Bbl)	OPER Annual (\$/Bbl)	Total (\$/Bbl)	
International Fleet													
70,000 dwt Pre-MARPOL	1.a. PL/Spaces, 30% coverage	\$507,186	1,064	953	2,017	1,149	985	2,134	118	\$5,967	\$15,569	\$4,314	
70,000 dwt Pre-MARPOL	1.b. PL/SBT, 30% coverage, with ballast to max. feasible draft	\$850,643	780	0	780	1,149	985	2,134	1,354	\$2,305	\$863	\$628	
70,000 dwt Pre-MARPOL	1.c. PL/CBT, 30% coverage, empty to extent feasible	\$777,694	990	0	990	1,149	985	2,134	1,144	\$4,891	\$789	\$680	
70,000 dwt MARPOL 73	2.a. HBL all tanks	\$1,811,766	653	0	653	1,285	0	1,285	632	\$2,867	N	\$2,867	
70,000 dwt MARPOL 73	2.b. HBL, equivalent to Regulation 13G	\$774,642	813	0	813	1,285	0	1,284	472	\$1,641	N	\$1,641	
70,000 dwt Pre-MARPOL	3. PL/Spaces as in 1.c. and HBL as in 2.b.	\$1,091,392	647	0	647	1,149	985	2,134	1,487	\$2,174	\$1,108	\$734	
70,000 dwt MARPOL 73	4. Retrofit double bottom	\$2,899,672	559	0	559	1,285	0	1,285	726	\$3,994	N	\$3,994	
70,000 dwt MARPOL 73	5. Retrofit double sides	\$3,589,187	1,140	0	1,140	1,285	0	1,285	145	\$24,753	N	\$24,753	
284,000 dwt Pre-MARPOL	1.a. PL/Spaces, 30% coverage	\$3,076,814	2,617	677	3,294	2,884	707	3,591	297	\$11,524	\$103,708	\$10,371	
284,000 dwt Pre-MARPOL	1.b. PL/SBT, 30% coverage, with ballast to max. feasible draft	\$2,688,641	1,963	0	1,963	2,884	707	3,591	1,628	\$2,919	\$3,804	\$1,652	
284,000 dwt Pre-MARPOL	1.c. PL/CBT, 30% coverage, empty to extent feasible	\$2,376,370	3,502	0	3,502	2,884	707	3,591	89	-3,845	\$3,362	\$26,763	
284,000 dwt MARPOL 73	2.a. HBL all tanks	\$5,086,829	1,556	0	1,556	3,803	0	3,803	2,247	\$2,264	N	\$2,264	
284,000 dwt MARPOL 73	2.b. HBL, equivalent to Regulation 13G	\$3,113,004	1,946	0	1,946	3,803	0	3,803	1,857	\$1,676	N	\$1,676	
284,000 dwt Pre-MARPOL	3. PL/Spaces as in 1.c. and HBL as in 2.b.	\$3,639,618	2,063	0	2,063	2,884	707	3,591	1,528	\$4,433	\$5,149	\$2,382	
284,000 dwt Pre-MARPOL	4. Retrofit double bottom	\$6,872,886	2,150	643	2,793	2,884	707	3,591	798	\$9,364	\$107,842	\$8,616	
284,000 dwt Pre-MARPOL	5. Retrofit double sides	\$9,935,982	2,276	640	2,916	2,884	707	3,591	674	\$16,342	\$149,573	\$14,732	